

RIGHS TO THE GOOD AND HEALTHY ENVIRONMENT

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I. INTRODUCTION

During the 1960's, when environmental issues suddenly became popular, legal scholars began to examine the possibility of using common law remedies to combat pollution and to force administrative agencies to be more responsive to environmental concerns. Many commentators concluded that various doctrines of administrative and tort law seriously and unduly handicapped a plaintiff seeking to protect the environment.¹ Many also suggested or implied that if freed of these doctrines, litigation would make a major contribution to the improvement of environmental quality.² Whatever the specific proposal for reform, most commentators seem to have been motivated by the same concern: in pollution cases what common law remedies

there were tended to be granted on the basis of the plaintiff's property rights, not on the basis of any right he might have to a clean environment. Without some property right or special interest the plaintiff was likely to be deprived of access to the courts. Even with a recognized common law right, when, for example, a plaintiff's right to water undiminished in quality conflicted with the factory's right to pollute it, the latter was almost certain to win. At best, the victim was likely to be compensated by damages and the polluting activity allowed to continue.

In a number of American jurisdictions, governments have responded to these problems by proposing reform. Three of the techniques proposed are: 1) to expand the

¹ See, e.g. Juergensmeyer, "Control of Air Pollution Through the Assertion of Private Rights" (1967), Duke L.J., 1126, at 1128; Miller, "Air Pollution Control: An Introduction to Process Liability and Other Private Action" (1970), 5 New England L. Rev., 163 at 168; Sive, "Some Thoughts of an Environmental Lawyer in the Wilderness of Administrative Law" (1970) Colum. L. Rev., 612 at 620.

² See, e.g. Esposito, "Air and Water Pollution: What to do While Waiting for Washington," (1970), 5 Harv. C.R.C.L.L. Rev., 32, at 38; Fernandez, "Due Process and Pollution: The Right to a Remedy" (1971), 16 Vill. L. Rev., 762, at 789; Robert, "The Right to a Decent Environment: E=MC2: Environment Equals Man Times Courts Redoubling Their Efforts," (1970), 55 Cornell L. Rev., 674, at 674.

public trust doctrine, 2) to enact statutes creating environmental rights, and, in some states, 3) to create new constitutional rights. The Canadian response has been much more limited but there are a few initiatives that might be interpreted as attempts to establish a right to a healthy environment in Canada.

II. PUBLIC TRUST DOCTRINE

The expansion of the public trust doctrine to expressly create environmental rights was first proposed by Joseph Sax in his book entitled *Defending the Environment*. He seems to have concluded that people who ask government agencies to refuse to permit development harmful to the environment were treated as "supplicants",³ or "outsiders".⁴ His suggestion was to give them rights. He suggested that every member of the public ought to have rights enforceable by law "equal in dignity and status to those of private property owners".⁵ The right he proposed was an adaptation to contemporary environmental problems of the Roman law concept, carried over into British law and, in a limited form, into U.S. law, of the "public trust". The result he described as "a new charter of environmental rights".

³ Sax, J., *Defending the Environment* (New York: Alfred. A. Knopf, 1971), at 60.

⁴ *Ibid* at 64.

⁵ *Ibid* at xix of his Foreword.

⁶ *Ibid* at 158 - 174.

In ancient Rome, the public trust seems to have involved the common ownership and use by the public of the air, sea and saashore. In ancient Britain, it seems to have been narrowed to a right of public access to fishing and navigation in relation to Crown-owned and privately owned waters and shores. United States law adopted the doctrine from British common law. In the United States, the common law doctrine has been used to enable the public to challenge the uses to which governments may put public lands, to challenge the alienation of public lands to private ownership or use, and to limit the right of private land owners to hinder access to certain lands.⁷ If we read most narrowly the doctrine's coverage it includes the "public domain below the water mark on the margin of the sea and the great lakes, the waters over these lands, and the waters within rivers or streams of any consequence. . . . Traditional public trust law also includes parklands especially if the have been donated to the public for specific purposes. . . ." But a much broader interpretation is also possible:

Public Trust problems are found wherever governmental regulation comes into

⁷ Hunt, C.D., *The Public Trust Doctrine in Canada*, in Swaigen L. *Environmental Rights in Canada* (Toronto: Butterworths, 1981) at 152 - 152.

⁸ Sax, J. "The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention" (1970), 68 Mich. L. Rev. at 471, 556.

question, and they occur in a wide range of situations in which different public interests need protection against tightly organized groups with clear and immediate goals.⁹

Thus, the doctrine may be:

equally applicable and appropriate in controversies involving air pollution, the dissemination of pesticides, the location of rights of way for utilities, and strip mining or wet land filling in private lands in a state where governmental permits are required.¹⁰

Actually implicit in the trust doctrine is the judicial recognition of a trustee-beneficiary relationship between the government and the public. A trust is found to exist wherever the public interest demands. This trust is considered by the government to be a condition of its authority to govern. Thus, in the famous decision of *Illinois Central Railroad v. Illinois*,¹¹ the Supreme Court said that the state could not irrevocably alienate its entire authority and responsibility over land under Lake Michigan. The Court said that, although the State of Illinois undeniably held title to the

lands under the navigable waters of the Lake, such title is "held in trust for the people of the state that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein freed from the obstruction or interference of private parties."¹² Moreover:

The trust devolving upon the state for the public, and which can be discharged by the management and control of property in which the public has an interest, can not be relinquished by a transfer of the property. The control of the state for the purpose of the trust can never be lost, except as to such parcels as are used in promoting the interests of the public therein, or can be disposed of without any substantial impairment of the public interest in the lands and waters remaining. . . . The state can no more abdicate its trust over property in which the whole people are interested, . . . so as to leave them entirely under the use and control of private parties, . . . than it can abdicate its powers in the administration of government and the preservation of the peace.¹³

With this language the Court creates what Professor Joseph L. Sax calls a "model for judicial skepticism", which means whenever a state holds a resource which is freely available for the public use, a court will regard with no small degree of skepticism any governmental conduct limiting that resource to more restrictive uses or subjecting a public use to the self-interests of private parties. This model thus im-

poses a special burden of justification on a government, state or federal, where such circumstances are brought into question.

The public trust may apply not only to land that belongs to government, but also to land formerly owned by the government which has been disposed to private ownership. This standard was also described in *Illinois Central*, where the Court said, "so with trusts connected with public property, or property of a special character, like lands under navigable waters, they can not be placed entirely beyond the direction and control of state."¹⁵ This "special character" should be viewed as originating from property whenever a major threat to the public interest in the land arises". The trust is the assurance to the people that, at any given time, the uses to which any property will be put, must be consistent with the public interest.¹⁶

The trust doctrine is most easily applied where the people wish to challenge a government use of government-owned property contrary to the public interest. The citizen may, after having run out of all available administrative remedies, seek a writ of mandamus to force the appropriate government administrator to use the property in a way which is consistent with the public interest, namely with the terms

of the trust. The plaintiff must either establish that an abuse of legislative authority has happened,¹⁷ or that the act sought to be enforced is one which the agency is under an affirmative duty to perform.¹⁸ The argument is that the government, as trustee of the natural resources, has breached or is threatening to breach the fiduciary relationship between it and the beneficiaries of the trust, the people. Although relying on a statute would strengthen the plaintiff's position, it is not important; the "trust is in the nature of a common law duty which the government bears as a condition of its lawful authority to govern".¹⁹ The burden of proof will be on the public to establish that the challenged government action, presumably valid, is not completely consistent with the public interest in improving and protecting the environment. Every transfer of property by the government to private individuals implicitly includes the obligation that the property is used for purposes not contrary to the public interest. Thus, any private misuse of such property may also, in theory, be the basis for a cause of action. The action, brought by the public as a class, would seek to force the appropriate government agency or officer to impose limitations to preserve the

⁹ *Ibid* at 556.

¹⁰ *Ibid* 556 - 57.

¹¹ 146 U.S. at 387 (1892) in 1869 the Illinois legislature made a grant, in fee simple, to the Illinois Central Railroad of all the land underlying Lake Michigan for one mile out from the shoreline and extending for one mile in length bordering the city of Chicago. In 1873 the legislature chose to repeal the grant and brought this action to have the original grant declared invalid. The Supreme court held in favor of the state.

¹² *Ibid* at 452.

¹³ *Ibid* at 42.

¹⁴ Sax, *supra* note 8 at 490-91.

¹⁵ *Supra* note 11 at 454.

¹⁶ Berlin, Roisman & Kessler, *Law in Action: The Trust Doctrine* (New York: Walker and Company, 1970).

¹⁷ *Prieve v. Wisconsin State Land Improvement Co.*, 93 Wis. 534, 67 N.W. 918 (S.C. 1896).

¹⁸ 547, 67 N.W. at 921.

¹⁹ *Supra* note 16, at 12.

corpus of the trust. Once again, the public would be required to bear a very substantial burden of proof by demonstrating that the limitations sought were clearly necessary to satisfy the demands of the public interest. Plaintiffs would thus be required to overcome the assumption that private property may be used for any reasonable purpose not clearly declared illegal by the government.

From the description above it can be concluded that the court recognized the public trust as a legitimate interest that gave standing to members of public, apart from any pecuniary or proprietary interest, to challenge government decisions. The public trust seems to be useful as a remedy for citizens against government decisions, and useful actions and the "balance of convenience" test applied on interim injunction applications, creating a doctrine of common property and private trusteeship for air and water seems to have the same result as liberating standing in public nuisance cases.²¹⁾

Pollution, however, is not the only form of environmental degradation. Other examples include the building of roads through wilderness areas, filling marshes, depleting non-renewable resources, flooding

²⁰ Swaigen J. & Woods, R., A Substantive Right to Environmental Quality, in Swaigen, J. *Environmental Rights in Canada* (Toronto, Ont.: Butterworths, 1981), at 210.

²¹ *Ibid.*

lands or diverting water courses, and cutting off visual access to sights. None of these activities may happen on government-owned land without government permission. If the government rents its land out to private companies for such activities; the public has little recourse. Sax would probably say that the public trust concept would apply to these situations, permitting the courts to challenge any activity which puts private interest in public lands above general welfare. Again, if the remedy is only a balancing, this might be achieved by improved access to government information, notification of the public concerned, and broader public participation.²²⁾

Although Canada's common law also originated in English common law, the concept of public trust has not developed in Canada as it has in the United States.²³⁾ While the public rights of fishing and navigation are established in Canadian law, they have been narrowly interpreted, and do not include the right of access to the shore across private land, nor a right of trapping from a boat under the guise of navigation. Interference with the exercise of the public rights may be categorized as a public nuisance and therefore constitute a cause of action, however, only a member of the public who is able to show that he has suf-

²² *Ibid.*

²³ *Supra* note 7, at 163.

fered special damage compared to other members of the public will be entitled to sue. Although the provinces lack the legislative power to interfere with the public rights, parliament is competent to do so. The only apparent limitation upon the Parliamentary power is that Parliament may not grant proprietary fishing rights where it itself has none.²⁴⁾

There are some cases regarding fishing and navigation which provide a good basis for considering common law and public trust. They may be divided into cases dealing with the private impairment of public rights, and those dealing with government actions that may diminish or violate the public right.

One of the earliest statements concerning the public right is found in *Gage v. Bates*,²⁵⁾ a trespass action. The plaintiff claimed ownership of a non-tidal inlet, and along with it the right to prevent the defendant from entering the inlet in a skill, placing nets and fishing there. Richards, J. considered the case as one requiring him to decide whether a Crown grant in relation to a navigable river could have the effect of depriving the public of the right of fishing and passing over it. According to the common law rule, a body of water was considered a navigable river if there was a flux and reflux of tide. Richards, J. decided that this definition did not

²⁴ *Ibid* at 167.

²⁵ (1975), 7. U.C.C.P. 116. (C.A.).

apply to this case and found the inlet in question navigable because of the depth of water in the inlet and its use by boats of considerable size.²⁶⁾ He then stated the applicable rule:

If the *locus in quo* is a public navigable river then it is a public highway and all her Majesty's subjects of common right may pass over it in boats and fish therein, notwithstanding the grant of the soil by the Crown, for such grant must be taken subject to the public right.²⁷⁾

The Supreme Court of Canada had an opportunity to consider the nature of the public right in an 1883 trespass action: *Wood v. Esson*.²⁸⁾ Both the plaintiff and the defendant were owners of wharves and water lots in Halifax Harbour. The plaintiff extended his wharf, effectively cutting off the access of the defendant's boat to his wharf. The defendant removed the obstruction, and as a result was sued in trespass. The plaintiff's action was dismissed by Ritchie, C.J. on these short grounds:²⁹⁾

There can be no doubt that all Her Majesty's liege subjects have a right to use the navigable waters of the Halifax harbour, and no person has any legal right to place in the said harbour, below water mark, any obstruction or impediment so as to prevent the free and full enjoyment of such right of navigation.

Thus, the defendant had a legal for government against private ac-

²⁶ *Ibid* at 120.

²⁷ *Ibid.*

²⁸ (1884), 9. S.C.R. 239 (C.A.).

²⁹ *Ibid* at 243.

tivities, but it is not clear that it supports actions by private citizens against other private citizens, except perhaps in the narrow circumstances where a private owner restricts access to the water or shore for fishing and navigation. Sax appears to want to expand the subject matter of the trust concept, the classes of beneficiaries and the classes subject to trust duties. The nature and scope of the interest in air, water and private property that Sax would give the public is also unclear. He seems to be saying that air and water, like land owned by the government, are common property. Any discharge or emission of contaminants into them is, therefore, not merely a matter between the polluter and his neighbour or between polluter and government, but is also an issue between the polluter and all other members of the public. Because air and water are public property, any person is entitled to take legal action to protect them. Sax may mean that the private property owner is also a trustee of the air and water entering and leaving his land, as the government is trustee of lands and waters in the public domain. If so, a less circuitous way of regulating pollution might be to remove the Attorney General's monopoly on enforcement if public nuisance cases and grant standing to any member of the public. Since the remedy Sax suggests, a balancing of interests, seems the same as the "reasonableness" test which is used in nuisance right to remove the obstruction to

enable him to navigate the waters with his steamers and vessels Strong J. said:

The title to the soil did not authorize the plaintiffs to extend their wharf so as to be a public nuisance, which, upon the evidence, such an obstruction of the harbour amounted to, for the Crown can not grant the right so to obstruct navigable waters; nothing short of legislative sanction can take from anything which binds navigation the character of a nuisance.³⁰

The same language is found in the 1886 decision of *Quiddy River Boom Co. v. Davidson*.³¹ The plaintiff, a riparian owner, at trial obtained damages and an injunction against the defendant. The defendant was a logging company which had interfered with access to his land from the water by setting up booms and piers in a bay to hold its logs in place. On appeal to the New Brunswick Supreme Court, Allen, C.J. said that ownership of the bed of a river is subject to the public right of navigation. A party exercising his rights must do so "with due regard to the rights of others and in a reasonable manner, and in such a way that he does not do any damage which by reasonable care he might have avoided."³² Reasonable use of a river for navigation must depend upon the circumstances. For example, when the navigation in question

³⁰ *Ibid* at 242.

³¹ (1886), 25 N.B.R. 580 (C.A.).

³² *Ibid* at 594.

³³ *Ibid*.

is the driving of logs, the extent of the right to navigate may depend upon "the quantity of lumber in the river at the time, the state of the New Brunswick Supreme Court varied an injunction, granted by the trial judge, against any interference by the log drivers with the riparian owner's rights, to allow a reasonable temporary interruption of access.

It has been said that navigable water on privately owned land can not be used by a stranger (whether or not he has the right of navigation in such water) for access to hunt, shoot or fish on such private property.³⁴ Similarly, where a Crown grant contains the usual reservation of free access to the shore of the land for all vessels, boats and persons, the public has right of access to the shore from the water, but no right of access from the land.³⁵ The public is not allowed to pass over the lands of an adjoining proprietor to reach the shore. Even so, where there is any doubt whether the lands that must be crossed to gain access to the shore are public or private, the case of *Rhodes v. Perusse*³⁶ demonstrates that the courts tend to favour a finding of public rights. This case involved the interpretation of a Crown grant in the province of

³⁴ *Rice Lake Fur Co. Ltd. v. Mc Allister*, (1926) 2 D.L.R. 506. (C.A.).

³⁵ *Regina v. Davy* (1900), 27 Ont. A.R. 508. (Ont. H.C.).

³⁶ (1909), 41 S.C.R. 264, G.E.L.R. 158. (C.A.).

Quebec. The defendant, who claimed to have been granted title to the foreshore, fenced the land in question, cutting off public access to the shore of the St. Lawrence River. The plaintiff said that language in the grant to the defendant had the effect of reserving a strip of land as a public beach. In so finding, the Chief Justice of the Supreme Court of Canada said that:

The Crown, as owner of the foreshore, had undoubtedly the right to cut it up and dispose of it as it deemed best; but clearly in so doing it owed a duty to the general public irrespective of the special rights of the riparian owners to protect them in the enjoyment of the common law right of *access et sortie* to the river which they had and of which they then must necessarily be deprived in the contingency then foreseen that the beach might be laid out for building lots. It is not to be assumed that Crown would be more solicitous for the private interests of certain individuals than for the common law rights of the general public.³⁷

III. STATUTORY ENVIRONMENTAL RIGHTS

Nowadays many states in the United States have statutes permitting private individuals to initiate judicial proceedings to enjoin a public nuisance. Somewhat different approaches have been taken by Michigan's Environmental Protection Act (MEPA) and Minnesota's Environmental Rights Act

³⁷ *Ibid* at 268.

⁴⁰ Lohrmann, R., "The Environmental Lawsuit: Traditional Doctrine And Evolving Theories to Control Pollution" (1970), 16 Wayne Law Review, 1085, at 1127.

(MERA). Their major goals are to free the courts from most of the common law restraints and to enable them to articulate and enforce a public right to create an environmental right that is not dependent on property or financial interests, but which is equivalent to property rights.⁴²⁾

IV. THE MICHIGAN ENVIRONMENTAL PROTECTION ACT

This act was drafted by Professor Joseph Sax of the University of Michigan as his model for environmental reforms and was the legal embodiment of his theories. The act removed or changed all the common law doctrines that were supposed to have hindered the courts. According to it, an action may be brought for declaratory or injunctive relief against anyone who "has or is likely to pollute, impair or destroy the air, water or other natural resources or the public trust therein". Under the act, restrictions on standing are abolished. Section 1202(1) is of particular interest for it extends standing to any member of the public to sue both government agencies and other members of the public.⁴³⁾ It states:

The Attorney General, any political subdivision of the state, any instrumentality or agency of the state or of a political

subdivision thereof, any person, partnership, corporation, association, organization or other legal entity may maintain an action in the circuit court having jurisdiction where the violation occurred or is likely to occur for declaratory and equitable relief against the state, any political subdivision thereof, any instrumentality or agency of the state or of a political subdivision thereof, any person, partnership, corporation, association, organization or other legal entity for the protection of air, water and other natural resources and the public trust therein from pollution, impairment or destruction.

Prior recourse to an administrative agency is necessary only if the court, in unspecified circumstances, decides that this is desirable as section 1204(2) provides:⁴⁴⁾

If administrative, licensing or other proceedings are required or available to determine the legality of the defendant's conduct, the court may remit the parties to such proceedings. . . . In so remitting the court may grant temporary equitable relief where necessary for protection of air, water and other natural resources or the public trust therein from pollution, impairment or destruction. In so remitting the court shall retain jurisdiction of the action pending completion thereof for the purpose of determining whether adequate protection from pollution, impairment or destruction has been afforded.

If "there is involved a standard for pollution or an anti-pollution device or procedure, fixed by rule or otherwise, by an instrumentality or agency of the state or a political subdivision thereof,"⁴⁵⁾ the court may "de-

termine the validity, applicability and reasonableness of the standard."⁴⁶⁾ If the standard is found to be "deficient", the court may "direct the adoption of a standard approved and specified by the court".⁴⁷⁾

The defendant may, of course, try to rebut the plaintiff's *prima facie* case,⁴⁸⁾ but the only affirmative defence set forth in the Act requires a finding "that there is no feasible and prudent alternative to defendant's conduct and that such conduct is consistent with the promotion of the public health, safety and welfare in light of the state's paramount concern for the protection of its natural resources from pollution, impairment or destruction".⁴⁹⁾

The burden of proof is therefore the only traditional doctrinal problem which still remains, and even this is partly a matter of form rather than substance. Although the plaintiff must establish a *prima facie* case of "pollution, impairment or destruction", he need not establish that the defendant's conduct is unreasonable because that issue is implied under the affirmative defense, on which the defendant has the burden of proof. In nuisance law, by contrast, the tort is defined as "unreasonable" interference with the plaintiff's

rights.⁵⁰⁾ Accordingly, in some jurisdictions the plaintiff's burden of proof extends to the issue of reasonableness as well as the issue of harm.⁵¹⁾ To this extent, the Act effectively shifts the burden of proof.

V. THE MINNESOTA ENVIRONMENTAL RIGHTS ACT

Despite several different provisions, the Minnesota Environmental Rights Act (MERA)⁵²⁾ passed in 1971, contains the principle features of the Michigan Act. Every resident, government, or other entity within the state has standing to sue under MERA.⁵³⁾ The Act authorizes suits to enforce existing environmental standards and requirements,⁵⁴⁾ suits to enjoin conduct that "materially adversely affect or is likely to materially adversely effect the environment",⁵⁵⁾ intervention or judicial review of the administrative proceedings that concern environmental matters,⁵⁶⁾ and suits challenging the adequacy of state environmental standards and actions.⁵⁷⁾ As in the Michigan Act,

⁵⁰ W. Prosser, *Handbook on The Law of Tort* (St. Paul, Minn.: West Publishing Co. 1971) at 580-82.

⁵¹ *Ibid* at 581.

⁵² Minn. Stat. Section 116B 01-13 (1976).

⁵³ *Ibid* section 116B. 13.03(1).

⁵⁴ *Ibid* section 116B. 02(2).

⁵⁵ *Ibid*.

⁵⁶ *Ibid* section 116B. 09.

⁵⁷ *Ibid* section 116 B. 10 (1976).

⁴² Byden. D. "Environmental Rights in Theory and Practice" (1978), 65 Minnesota Law Review, 163, at 176.

⁴³ Mich. Comp. Law Ann. Section 691. 1202(1).

⁴⁴ *Ibid* section 691. 1204(2).

⁴⁵ *Ibid* section 691. 1202(2).

⁴⁶ *Ibid* section 591. 1202(2)(a).

⁴⁷ *Ibid* section 691. 1202(2)(b).

⁴⁸ *Ibid* section 691. 1203(1).

⁴⁹ *Ibid*.

although the plaintiff has the burden of proving environmental harm, the issue of possible justifications is an affirmative defence.⁵⁸ Unlike MEPA, however, MERA expressly provides that "economic considerations alone shall not constitute a defence hereunder."⁵⁹ This provision, while still rather unclear, indicates an intent to limit the relative hardship doctrine even more than MEPA had done.

The Minnesota legislature probably was troubled by some of the bill's implications, for the sponsors had to approve several amendments. In contrast to MEPA, compliance with relevant regulations or permits of certain state agencies (including the Pollution Control Agency) is a defense to a MERA suit,⁶⁰ but the effect of this amendment is uncertain since another section of the Act entitles the plaintiff to attack the regulation or permit as inadequate.⁶¹ Therefore, the defence of compliance with a regulation may be available only when the regulation itself is considered to be strict enough. The sponsors also agreed to an amendment that hinders suits against landowners for conduct on their own land that "can not reasonably be expected to pollute, impair, or destroy any other air, land, or other natural resources

⁵⁸ *Ibid* section 1168.04.

⁵⁹ *Ibid* section 116 B. 04.

⁶⁰ *Ibid* section 116 B. 03(1).

⁶¹ *Ibid* section 116 B. 10.

located within the state."⁶² Again, this agreement seems insubstantial because almost any controversial activity will affect resources beyond the defendant's property.⁶³ Finally, in response to objections by rural legislators, an exemption was provided for farm related activity,⁶⁴ and suits based solely on violation of odor regulation were disallowed.⁶⁵

VI. THE MICHIGAN STUDIES

There have been four studies of litigation under MEPA carried out by Haynes,⁶⁶ Sax and Conner,⁶⁷ Sax and DiMento,⁶⁸ and Slone.⁶⁹ These studies, which cover the period from MEPA's enactment on October, 1, 1970, to April 15, 1985 were undertaken with several purposes: to provide lawyers with infor-

⁶² *Ibid* section 116 B. 03 (1).

⁶³ *Supra* note 42, at 176.

⁶⁴ *Ibid*.

⁶⁵ Minn Stat. Section 1168.02(5).

⁶⁶ Haynes, "Michigan's Environmental Protection Act in Its Sixth year: Substantive Environmental Law from Citizen Suits" (1976), 53, J. Urb L., 589, at 589.

⁶⁷ Sax and Conner, "Michigan's Environmental Protection Act of 1970: A Progress Report," (1972) 70 Mich. L. Rev., 1003, at 1003.

⁶⁸ Sax and DiMento, "Environmental Citizen Suits: Three Year's Experience Under The Michigan Environmental Protection Act" (1974), 4 Ecology L.Q. 1, at 16.

⁶⁹ Slone, D.K., "The Michigan Environmental Protection Act: Bringing Citizen Initiated Environmental Suits into the 1980's" (1985), 12 Ecology L.Q., 271, at 272.

mation about unreported cases,⁷⁰ "to help citizens assess the desirability of such legislation in other states,"⁷¹ to serve as experiments in efficacy research,⁷² and to continue the tracing and analyzing of published and unpublished cases filed under MEPA."

During the first five and one-half year period, from October, 1, 1970 to March 1, 1976 MEPA was involved in 120 cases or administrative proceedings.⁷⁴ Somewhat surprisingly, permanent environmental groups with more than local concerns were plaintiffs or intervenors in only nine cases,⁷⁵ local and *ad hoc* groups were similarly involved in 25 suits.⁷⁶ The single most common plaintiff (twelve cases) was the Wayne County Health Department.⁷⁷ Public agencies were plaintiffs or intervenors in 43 cases and defendants in 60 cases.⁷⁸ The most frequent issue was land use (50 cases), ranging from homesite development to stream channelization, and (17 cases).⁷⁹ During this same five year period, there were 47

⁷⁰ *Supra* note 66, at 590.

⁷¹ *Supra* note 68, at 2.

⁷² *Ibid* at 3.

⁷³ *Supra* note 69, at 272.

⁷⁴ *Supra* note 66, at 592.

⁷⁵ *Ibid* at 689.

⁷⁶ *Ibid* at 690.

⁷⁷ *Ibid* at 689.

⁷⁸ *Ibid* at 689.

⁷⁹ *Ibid* at 692.

successful MEPA suits and 28 unsuccessful ones. Eleven suits were not pursued, and the rest were pending when the final study was published.⁸⁰ As of April 15, 1983, a total of 185 actions involving MEPA had been filed either with the courts or with state administrative agencies.⁸¹

These studies conclude that The Michigan Environmental Protection Act has significantly enhanced the individual's legal and administrative opportunities to protect the environment. Sax and Conner asserted that "enough cases have been resolved speedily and intelligently to mark the Act as a success."⁸² It is clear that, with an annual rate of approximately 21 cases, the legislation has not led to an outpouring of vexatious litigation⁸³ or unnecessary delays in approval or construction of proposed developments, as had been asserted by opponents of the Act.⁸⁴ They argued that to implement the goal of the Act, which is to shift the focus of environmental problem solving from the agencies to the courts, would lead to an overpouring of lawsuits engendering interminable delays and would impede rational long-range planning and policy formulation based on expert

⁸⁰ *Ibid* at 696.

⁸¹ *Supra* note 69 at 273.

⁸² *Supra* note 67 at 1080.

⁸³ *Supra* note 68 at 37.

⁸⁴ *Supra* note 69 at 273.

input.⁸⁵⁾

Many of the achievements attributed to the act are indirect and beyond objective substantiation.⁸⁶⁾ Sax says that the act "has produced a sense of citizen involvement", teaching citizens that they can "successfully fight established interest groups," and that the legislation and its enactment show citizens in other states how to achieve a better understanding of proposed environmental legislation.⁸⁷⁾ Sax says that "I have always viewed the MEPA largely as a tool for education and institution-building on the local level."⁸⁸⁾

Although much information is available concerning MEPA's impact on the environment, the treatment of this subject has several defects.⁸⁹⁾ The authors try to describe several different topics, including how MEPA should be interpreted, whether judges perform competently, procedural issues, security bonds, and the role of lay witnesses. As a result, the articles move from pending cases to resolved cases, from a lengthy description of one case to a quick reference to another,

⁸⁵ DiMento, J. "Citizen Environmental Legislation in the State: An Overview" (1976), 53 *Journal of Urban Law*, 411, at 422 see also *supra* note 68a at 272.

⁸⁶ *Supra* note 20 at 214.

⁸⁷ *Supra* note 68 at 6.

⁸⁸ *Ibid* at 5.

⁸⁹ *Supra* note 42, at 180.

in a manner that further complicates the essential difficulties of measuring MEPA's real impact.⁹⁰⁾ More important, even the decisions that are fully described are difficult to evaluate because the authors rarely discuss whether the statistics reflect whether the MEPA count was essential to the result in the case. It seems clear that other causes of action usually were or could have been joined with the MEPA count,⁹¹⁾ yet the successful cases are generally treated as indicators of MEPA's impact, even though no effort is made to demonstrate that they either would not have been brought, or would have been decided differently under more traditional theories.⁹²⁾

The criteria used in these studies to evaluate the impact of litigation are far less stringent than those normally applied to administrative achievements.⁹³⁾ Professor Sax acknowledges that the MEPA cases have not been striking:

Nothing that has occurred under the MEPA has approached the sort of big-time test litigation with which the legal literature is generally concerned. Indeed, with a few rather tentative exceptions, the MEPA has not been used in a major assault against the biggest actors in the state the auto industry, agriculture, the electric generating utilities, or even the rapidly developing oil and gas or mining operations.⁹⁴⁾

⁹⁰ *Ibid*.

⁹¹ *Supra* note 66, at 651.

⁹² *Supra* note 42, at 180.

⁹³ *Ibid*.

⁹⁴ *Supra* note 68, at 5.

Despite this concession, the articles repeatedly attribute significant results to an unimpressive record. For example, after only thirteen cases had been resolved under MEPA, the first of these studies concluded that "enough cases have been resolved specially and intelligently to mark the act as a success."⁹⁵⁾

Bryden,⁹⁶⁾ a commentator who has been critical of the claims to success made for the Act by the first three studies, says:

Nowhere in these studies is a connection between MEPA and any specific large scale improvement in environmental quality demonstrated, and even the general attitudinal claims amount to little more than bare assertions... The nebulous character of other conclusions make them similarly questionable. The claim that MEPA has been responsible for "institutional-building at the local level" is difficult to appraise because the nature and importance of the "institutes" attributable to MEPA are not described. The allegation that MEPA has had an educational impact is, standing alone, impossible to evaluate; just about everything-perhaps even a faculty meeting can be called "educational."⁹⁷⁾

Despite this criticism, standing alone, the Michigan Environmental Protection Act does improve the citizen's potential access to legal mechanisms. It provides the court with a statutory basis for developing a judicial concept of environmental protection which perhaps could eventually prove equivalent to a substan-

⁹⁵ *Supra* note 67, at 1080.

⁹⁶ *Supra* note 42, at 181.

⁹⁷ *Ibid* at 181.

tive right to environmental quality. However, the Michigan studies do not establish that these potentials have been realized. There were only 120 cases in the first five and a half years, and most of these cases did not depend on the act. The subjective conclusions concerning citizen awareness and institution-building may be valid, but they do not demonstrate that the legislation has created a substantive right to environmental quality which could dramatically alter the court's decisions.⁹⁸⁾

VII. THE MINNESOTA STUDY

The Minnesota study was carried out by Bryden who examined the litigation from the date of enactment of the Minnesota Environmental Rights Act, June 8, 1971, to June 8, 1976.⁹⁹⁾ The Act was involved in 26 cases which were resolved by judicial decision or by settlement prior to June 8, 1976.¹⁰⁰⁾ By asking for opinions of the participating attorneys, Bryden took particular care to determine whether the Act was essential to the result in each successful case.¹⁰¹⁾ As the Michigan studies did, Bryden concluded that the Minnesota Environmental Rights Act "... has not resulted in overcrowded court calendars, es-

⁹⁸ *Supra* note 20, at 215.

⁹⁹ *Supra* note 42, at 182.

¹⁰⁰ *Ibid*.

¹⁰¹ *Ibid* at 183.

pecially since... much, if not all, of the litigation probably would have occurred even without the MERA,"¹⁰² that the cases have not presented the court with complex scientific issues beyond its realm of competence,¹⁰³ and that there was no evidence of delays in development projects.¹⁰⁴ Regarding the expectations which are normally associated with environmental rights legislation, Bryden says that if:

the fears of Rights Act opponents have largely proved to be unfounded, so have the hopes of its advocates. Of the 26 MERA cases resolved within the study period, fifteen were, or may have been, at least partially successful for the plaintiffs. But, by a fairly generous tally the Rights Act appears to have influenced the outcome in only about half of these cases, and in only two... is it clear both that the suit achieved something and that MERA was essential to that achievement. Resolving all these doubts in favor of MERA's efficacy, one must still conclude that the direct, immediate effect of MERA litigation on the overall quality of Minnesota's environment has been insubstantial.¹⁰⁵

Why have the direct effects of MERA litigation been so few compared to the high expectations held in much of the literature about environmental litigation? According to Bryden one good answer would be that not enough suits have been brought. The rather low volume of

suits, especially by citizens groups, may be at least partly due to the expense of litigation. As a rule, none of the statewide environmental organizations can afford to pay all the expenses even if in varying degrees the attorneys donate their time.¹⁰⁶ Another possible reason for the scarcity of cases is that many lawyers may still be unfamiliar with this relatively new statute.¹⁰⁷ But increased attorney familiarity will not alleviate the cost problem and therefore the percentage of actions brought by ideologically motivated plaintiffs will probably not rise significantly. A statutory allowance of attorney's fees might alleviate the financial impediment problem, but if it were applied to defendants as well as plaintiffs it could do more harm than good.¹⁰⁸

The most obvious explanation which can be drawn from the study is that, despite the abolition of standing requirements, the typical MERA plaintiff, like the typical common law plaintiff, has been an aggrieved property owner, less interested in establishing a principle that in preserving his own residential environment or saving some nearby resource about which he cares. Of course, such motives should not always be ignored, but they do limit the Act's potential ef-

fectiveness in resolving problems that do not directly and severely affect any one party's economic interest and in establishing broad guidelines that will alter the behavior of non-parties.¹⁰⁹

Despite his criticisms, Bryden concludes that MERA clearly achieves Sax's major goal to free the courts from most of the common law restraints, enabling them to articulate and enforce a public right to environmental quality.¹¹⁰ But it does not yet achieve the more ambitious goal of creating an environmental right, not dependent on property or financial interests, that is equivalent to property rights. Because most of the successful cases were brought by property owners, they pitted one property right against another. It is impossible to determine whether MERA enhanced existing property rights or created an environmental right independent of property interests.¹¹¹

In light of the decision under MEPA and MERA and all the evidence produced in the Michigan and Minnesota studies, one conclusion can be drawn. Although the American courts have sometimes shown that they may have capacity to interpret environmental rights legislation as equivalent to a substantive right, the litigation has

not shown that they will exercise this capacity. The legislation has given the citizen standing and has given some right to environmental quality, the exact nature of which has not been defined by the courts, but it is not clear that the courts will recognize these rights as substantive in the same sense that they recognize substantive property rights.¹¹²

Furthermore, other expectations often associated with environmental rights legislation have not been fulfilled. Cases have been few, and most of them have involved plaintiff's property interests and the plaintiff's standing and remedy did not therefore depend on the environmental legislation. However, if there has been a gap between performance and expectations, it may be caused more by an excess of expectations than by a failure in performance. It is unreasonable to hope that the legislative creation of an environmental right will be the best remedy to the problem of environmental litigation. Although the benefits in regard to standing are not to be denied, the courts must be given a legislative counterweight to set against traditional rights.¹¹³ But this does not mean that they will utilize or develop this legislative tool or that they will even interpret the legislation as a "substantive right".¹¹⁴ With the kind of legisla-

¹⁰² *Ibid* at 210.

¹⁰³ *Ibid*.

¹⁰⁴ *Ibid*.

¹⁰⁵ *Supra* note 42 at 213.

¹⁰⁶ *Ibid*.

¹⁰⁷ *Ibid*.

¹⁰⁸ *Ibid*.

¹⁰⁹ *Ibid*.

¹¹⁰ *Ibid* at 174.

¹¹¹ *Ibid*.

¹¹² *Supra* note 20, at 220.

¹¹³ *Ibid*.

¹¹⁴ *Ibid*.

tion described above, the courts have this opportunity, but they may not have the desire to use it. As Bryden says, the court may be unwilling to abolish the traditional doctrinal obstacles to environmental litigation; they reflect contemporary judicial values.¹¹⁵⁾

However, although it is certainly true that such legislation is an absolutely vital component in the machinery of environmental protection, it must be remembered that by itself such legislation is not enough. One must recognize the unresponsiveness of the legislature to demands for innovative environmental legislation in the face of industry's opposition.¹¹⁶⁾ Often industrial influence may tend to emasculate any provisions. Furthermore acts are unlikely be proclaimed unless the political conditions are right, no matter how immediate the problem.¹¹⁷⁾ Even where measures are enacted, they are usually in an attenuated form and are so blunted as to be ineffective.¹¹⁸⁾ The problem of enforcement, or rather the lack of it is also one that all too often characterizes environmental legislation. The appropriate body to

¹¹⁵ *Supra* note 42, at 217.

¹¹⁶ Stevenson, C.P. "A New Perspective on Environmental Rights After The Charter" (1983), 21 Osgoode Hall Law Journal, 390, at 394.

¹¹⁷ *Ibid* at 395.

¹¹⁸ *Ibid* at 396.

enforce legislation is often a government agency which, naturally enough, is sensitive to the existing political climate and can often avoid its responsibilities because of the very wide discretion habitually granted to it by environmental statutes.¹¹⁹⁾ Therefore something more is needed to bring vitality into the legislative process and into the enactments resulting therefrom. One possible answer lies in the establishment of some form of a constitutional right to a clean environment.

VIII. CONSTITUTIONAL ENVIRONMENTAL RIGHTS

In addition to specific statutory enactments, a number of American states have included environmental provisions in their constitutions. This constitutional approach provides two major advantages. By including environmental provisions in a state constitution rather than in an ordinary statute, the provisions are given the highest possible authority. A constitution expresses the fundamental assumptions of a people. Consequently, this fundamental approach should strengthen pro-environmental arguments at all levels within the state jurisdiction.¹²⁰⁾ The second benefit is that constitutional provisions are normally more difficult to repeal or amend than

¹¹⁹ *Ibid*.

¹²⁰ *Supra* note 20 at 221.

statutes.¹²¹⁾ Constitutional provisions may be said to reflect the underlying values of society, because constitutions recognize or establish fundamental rights which require judicial application, interpretation and protection. Constitutions also erect the political framework within which society is to be regulated.¹²²⁾

However, constitutional provisions expressing noble sentiments about the right of the people to a decent environment have double functions. If the provisions are self executing, that is, they become operative and act as an independent basis for judicial action without the need for further implementing legislation, they expand the public's environmental rights. If they are merely statements of policy, encouraging further legislation to implement these policies, it is arguable that they do not expand the rights of the citizen, but they do narrow the powers of the government.¹²³⁾

To the extent that a constitution recognizes fundamental rights, it, initially at least, has primarily an indirect effect:¹²⁴⁾ it gives such rights greater moral authority than those not recognized and simultaneously ensures that they receive more widespread respect and ap-

¹²¹ *Ibid*.

¹²² *Ibid*.

¹²³ *Supra* note 115 at 390.

¹²⁴ *Supra* note 3 at 200.

preciation. Thus the prime value of recognizing a constitutional right to a clean environment would be to catalyze the further development of the environmental ethic.¹²⁵⁾ Once a right becomes entrenched in a written constitution and is given recognition in the ultimate law of the state, there is a positive feedback in that the value which society places on that particular right is substantially increased. One of the most important features of a constitutional right to a clean environment, or to some similar right, must be to play this educational role.

Although constitutional rights do represent a society's fundamental values, this does not mean that those values are necessary apparent on the face of that society. The institutions of state may sometimes have to lead society in search of perceived higher values and ideals.¹²⁶⁾ Similarly, if a constitutional right to a clean environment existed, it would serve to support a greater public appreciation of the environment and to ensure fuller realization of both the present and potential threats to the environment and, ultimately, to society itself. This in turn would lead to a greater level of environmental awareness in the legislatures and would, therefore, serve to stimulate legislative reforms.¹²⁷⁾

A number of other legal conse-

¹²⁵ *Supra* note 115 at 391

¹²⁶ *Ibid*.

¹²⁷ *Ibid*.

quences could possibly result depending on the degree of activism of the judiciary. Thus the constitutional environmental rights could be used to protect environmental values in the face of more traditional legal concerns: the constitutional right would give the judiciary a cornerstone around which to build an environmental counterbalance to set against the traditional legal rights, in particular, the right to use one's property as desired.¹²⁸ One possible consequence might be a more environmentally enlightened application of the balance of convenience test on an application for an interlocutory injunction.¹²⁹ When a constitutional right is one of the factors to be taken into account, the environmental right will obviously be given greater weight than it would if the particular environmental right were merely a statutory one.¹³⁰

Similarly, the constitutional right, might allow the courts to exercise their equitable jurisdiction to grant injunctions more imaginatively.¹³¹ At present they seem to behave like a simple binary computer with only an on-off function allowing themselves no discretion in the applicable remedy.¹³² Alternatively, the constitutional environmental right could be applied

to enable the courts to develop a wider definition of nuisance or perhaps to shift the burden of proof in environmental litigation.

Sax argues that a constitutional environmental right is "sentimentalism".¹³³ Thus, while he accepts that:

Constitutional recognition of the right to a decent environment would be a token of our good intentions and help to set before us a goal toward which our society ought to aspire.¹³⁴

he suggests that such a declaration is no substitute for the "nitty gritty" of hard and fast rules established by legislation.¹³⁵ However, as has already been argued, it is not contended that one should be substitute for the other, but rather that they should work in double harness with one complementing the other. Sax also argues that such a constitutional right would have no substantive effect, because it lacks the

content that surrounds constitutional provisions like those governing free speech or the free exercise of religion, which, for all their uncertainty, incorporate specific historical experience that infuse meaning based on a common understanding within the community.¹³⁶

However, given a common commitment to conservation and protection of the environment, of which Sax himself approves, there is

little reason why a constitutional environmental right should not be adopted and developed as the United States court once had to do with all other constitutional provisions. The constitutional environmental right is not being proposed as an effective tool for all our environmental ailments but rather as a necessary backdrop against which other measures can be seen in proper relief. Sax's argument has also been made by Swaigen and Woods who suggest that

because of the breadth and abstractness of such a concept, it is possible that a right, although expressed in terms indicating a "substantive" interpretation, will not dictate a particular result in specific cases.¹³⁷

At present in the United States at least sixteen states have broad constitutional provisions dealing with the maintenance of the environment as a whole.¹³⁸ Of these sixteen, eleven merely have statements of policy or non-enforceable suggestions that further legislation will be passed.¹³⁹ In some cases, these provisions have acted as a policy basis for subsequent environmental protection legislation. For example, Article 2, section 7 of the Florida con-

stitution states that:

It shall be the policy of the state to conserve and protect its natural resources and scenic beauty. Adequate provision shall be made by law for the abatement of air and water pollution and of excessive and unnecessary noise.

This has been cited as the policy basis for subsequent environmental legislation, such as the Florida Environmental Land and Water Management Act of 1972. This Act states that its land and water management policies are established "in order to protect the natural resources and environment of this state as provided in section 7, Article 2 of the state constitution".¹⁴⁰ Although the constitutional provision has served as a policy basis for subsequent enactments, it does not create any rights or obligations or provide an independent basis for judicial action.¹⁴¹ It can be argued that the constitutional amendments of the other ten states that make broad statements of legislative intent also act as a moral force for legislative action and a policy basis for environmental legislation. However, the amendments do not create any "substantive rights" to environmental quality which the citizen could bring before the court as a counterweight to proprietary rights. Such constitutional provisions are statements of policy and not statements of rights.¹⁴²

¹³⁷ *Supra* note 20, at 221.

¹³⁸ *Ibid* 222.

¹³⁹ Harrell, M.L. "A Proposal for Revision of the Florida Constitution: Environmental Rights for Florida Citizens" (1977), 5 Florida State University Law Review, 809 at 819.

¹⁴⁰ Fla Stat.s. 380.021 (1975).

¹⁴¹ *Supra* note 20, at 223.

¹⁴² *Ibid*.

¹²⁸ *Ibid*.

¹²⁹ *Ibid*.

¹³⁰ *Ibid*.

¹³¹ *Ibid*.

¹³² *Ibid*.

¹³³ *Supra* note 3, at 234.

¹³⁴ *Ibid* at 235.

¹³⁵ at 236.

¹³⁶ *Ibid* at 235.

Other state constitutions have been amended to include stronger statements, in an attempt to create rights. In some cases, however, whether these provisions are "self executing", that is, whether they are enforceable in the absence of further legislation, is questionable. Harrel has said that "citizens have constitutionally protected rights to a decent environment in Illinois, Massachusetts, Pennsylvania, Rhode Island and Texas".¹⁴³ With respect to Massachusetts, Pennsylvania, Rhode Island and Texas, this statement is open to dispute. There has been no judicial interpretation of the constitutional amendments in these states.¹⁴⁴ They contain language that may be read to mean that they are not self-executing. Therefore, it is possible that the courts will relegate them to the realm of policy statements. Moreover, even if they are held to be self-executing, whether or not the courts would interpret these purported rights to environmental quality as being equivalent to property rights, or as requiring anything more than consideration of environmental factors before proceeding with environmentally harmful activities is questionable.¹⁴⁵ Only in Illinois and Pennsylvania are there constitutional provisions which seem to be self executing and which have been

¹⁴³ *Supra* note 138, at 812.

¹⁴⁴ *Supra* note 20, at 223.

¹⁴⁵ *Ibid.*

subject to some judicial interpretation.

Article II of the Illinois Constitutional states that:

Section 1, public policy-legislative responsibility

The public policy of the state and the duty of each person is to provide and maintain a healthful environment for the benefit of this and future generations. The General Assembly shall provide by law for the implementation and enforcement of this public policy.

Section 2, rights of individuals

Each person has the right to a healthful environment. Each person may enforce this right against any party, governmental or private, through appropriate legal proceedings subject to reasonable limitation and regulation as the General Assembly may provide by law.

Section 1 of of article 11 not only contains a policy statement and legislative directive but places a corresponding duty upon the state and upon the individual to provide and maintain a healthful environment. As mentioned above, a general policy statement does not create any rights or obligations. It has been argued, however, that the duty aspect of this clause could form the basis for an environmental suit.¹⁴⁶ This issue has not been litigated.

Section 2, however, declares that each person has an enforceable right to a healthful environment, subject to any reasonable limitations and regulations that the state

¹⁴⁶ Howard "State Constitutions and the Environment" (1972), 58 Va. L. Rev., 190, at 194.

may impose. This section has been the subject of some litigation.

In *Scattering Fork Drainage District v. Ogilvie*,¹⁴⁷ the court dismissed an action based on article 11 for an injunction to prevent construction along a river. In its decision, the court said that the suit was not supported by factual evidence and one commentator has since concluded that the decision was not thought to be based on any "general unwillingness to apply Illinois environmental provisions".¹⁴⁸

In *Parson v. Walker*¹⁴⁹ an action was brought to enjoin university trustees from permitting the construction of a reservoir. The court held that Article 11 gives every citizen standing to bring an action without needing to show special injury or damages as required in common law nuisance action. However, although the court understood that Article 11 creates a cause of action, it dismissed the case for the reason that the suit was premature. Therefore, the case was actually decided on non-Article 11 grounds.

In *Tri-Country Landfill Company v. Illinois Pollution Control Board*,¹⁵⁰ a landfill company charged with violation of an Illinois environmental statute tried to challenge a decision of the state Pollution Control Board which found the

¹⁴⁷ 311 N.E. 2d 203 (Ill.App.Ct., 1974).

¹⁴⁸ *Supra* note 138, at 814.

¹⁴⁹ 328, N.E. 2d 920 (Ill.App.Ct. 1975).

¹⁵⁰ 353 N.E. 2d 316 (Ill.App.Ct., 1976).

company guilty of causing waste pollution. The company argued that the Board was estopped from prosecuting it because the landfills had been authorized by the Board's predecessor. By citing article 11 of the Illinois Constitution, the court held that the defence of estoppel was inappropriate since it would deny the public's constitutional right to a healthful environment.

The courts' attitude toward the citizen's right to a healthful environment" is certainly difficult to discern from these cases. In the *Tri-County and Scattering Fork* cases, actions were brought by government agencies rather than by citizens, and in the case, although the courts recognized the right of a citizen to bring an action under article II, the action was dismissed as premature. Consequently, the courts have not yet considered the merits of a citizen suit.¹⁵¹ Moreover, in its wording, the scope of the Illinois provision could prove to be relatively narrow. It remains to be seen whether a "healthful environment" refers only to an environment promoting human health, or also to the health of flora and fauna and the maintenance of ecological balance, it will be interesting to see whether the contribution of aesthetic, spiritual, and other non-material value to "health" can be recognized.¹⁵² However, Swaigen and Woods con-

¹⁵¹ *Supra* note 138, at 815.

¹⁵² *Supra* note 20, at 224.

clude that the Illinois constitutional amendment has not led to an outpouring of litigation, and although the courts have accepted the provisions as a basis for standing for citizens, they have not had occasion to consider them fully. It is thus so it is too early to tell whether the provisions will be interpreted to provide substantive rights.¹⁵³

Unlike the environmental provision in Illinois constitution, the courts have given the environmental provisions of the Pennsylvania constitution fuller consideration Article I, section 27 of the Pennsylvania constitution says that:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and aesthetic value of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the commonwealth shall conserve and maintain them for the benefit of all people.

The Amendment was first considered in the *Commonwealth v. National Gettysburg Battlefield Tower Incorporated*.¹⁵⁴ In this case the state Attorney General sought to enjoin the construction of a 307-foot tower which be built on privately owned property adjacent to the Gettysburg National Military Park and which would be visible from the battle site. The public

¹⁵³ *Ibid* at 224-225.

¹⁵⁴ 8 Pa.Comm.231, 302 A 2d 886, aff'd 454 Pa. 193, 311 A. 2d 588 (1973).

would be charged to enter and to see the battlefield from the top of the tower, and would learn about the battle from an audio-visual presentation. The state argued that the tower would interfere with the site and harm the scenic, historic and aesthetic values of the environment. It brought as witnesses famous architects, historians, theologians, educators and state and federal parks administrations, who testified that the tower would interfere with the reverence generated by the battle site. The developer brought experts who proved the towers' financial benefit to the community, its architectural appropriateness, and the educational value of proposed audio-visual aids. The Court of Common Pleas denied the injunction because the anticipated injury was subjective and amorphous and the state had failed to establish by "clear and convincing evidence" that any harm would result from the project. On appeal to the Commonwealth Court of Pennsylvania, the court refused to review what it considered to be a finding of fact by the trial judge. A majority of the appeal court ruled that the constitutional amendment was self-executing and creating a new cause of action, although one disagreed on this point and a second said it was unnecessary to decide this point.

On a further appeal to the Pennsylvania Supreme Court, the merits of the case were subordinated to the question of whether the provision had any legal effect. Two Justices

said that the section was not self-executing. They considered it was too vague a statement to be basis for expanding the government's power over private property without statutory standards and procedures: "If we were to sustain the Commonwealth's position that the amendment was self-executing, a property owner would not know and would have no way, short of expensive litigation, of finding out what he could do with his property ... Accordingly ... supplemental legislation will be required to define the values which the amendment seeks to protect can be fairly regulated to protect those values."¹⁵⁵ The other two Justices said that "the Commonwealth, even prior to the recent adoption of Article I, section 27, possessed the the inherent power to protect and preserve for its citizens the natural and historic resources now enumerated in section 27, but they entertained serious reservations as to the propriety of granting the requested relief in the absence of appropriate and articulated substantive and procedural standards."¹⁵⁶ The Chief Justice and one fellow judge disagreed. They would have granted the injunction against the tower which they described as a "monstrosity" which would do violence to the natural scenic, historic and aesthetic values of Gettysburg. They accused

¹⁵⁵ Pa 311 A. 2d 588 at 593, 595.

¹⁵⁶ *Ibid*.

the court of emasculating and disembowelling a constitutional provision "which seems, by unequivocal language, to establish environmental control by public trust." They said the provisions of section 27 were "clear and uncomplicated."¹⁵⁷

A conclusion can be drawn from this case, namely, that there is tremendous judicial resistance to recognition of a substantive right to environmental quality, even when it is incorporated in strong language explicitly declaring the existence of the right and of a corresponding public trust; there is also equally passionate support. The courts have not reached any consensus on whether such a provision is self executing or merely a policy statement requiring further legislation. The courts have been unable to agree on whether such broad provisions are clear enough to allow for implementation in the absence of further legislation. They have held that, to succeed, the state must bring up not only a preponderance of evidence.¹⁵⁸ but clear and convincing evidence. In this regard, "clear and convincing" is taken to mean more than the proof on a balance of probabilities required in ordinary civil actions, but less than the proof beyond a reasonable doubt required in criminal cases.¹⁵⁹

¹⁵⁷ *Ibid*.

¹⁵⁸ *Supra* note 153, at 239.

¹⁵⁹ *Supra* note 20; at 226.

*Payne v. Kassab*¹⁶⁰ did little to settle the uncertainty as to whether section 27 could stand on its own, but did clarify its effect. Concerned citizens sought an injunction to prevent the state from widening portions of two city streets. The widening required the loss of approximately half an acre of park land in an area of historic interest, and the elimination of some trees and pedestrian walkways. Rejecting the argument that section 27 was "absolute" in the sense of prohibiting all environmental damage, the Commonwealth Court stated that:

It becomes difficult to imagine any activity in the vicinity of an historic town common that would not offend the interpretation of Article I, Section 27 which plaintiffs urge on us. We hold that section 27 was intended to allow the normal development of property in the Commonwealth, while at the same time constitutionally affixing a public trust concept to the management of public natural resources of Pennsylvania. The result of our holding is a controlled development of resources rather than no development.¹⁶¹

The court dismissed the complaint on the ground that although section 27 creates a public trust, the government in exercising the trust must balance its duty to provide for adequate traffic control against its duty to protect the environment.¹⁶²

The Commonwealth Court also ruled that the amendment was self-

executing. On appeal, however, this question was raised again. The Pennsylvania Supreme Court ruled this time that it was not necessary to explore the "difficult terrain" of whether section 27 was self-executing in a case in which the citizenry seeks to uphold the public trust provisions of the section against the government. The court did not doubt that the amendment created a public trust of public natural resources, and asked the government to conserve and maintain them for the benefit of all the people. The court said that this trust was operative without any implementing legislation and seemed to say that a remedy might be available to the public without the need to show a violation of any specific statute. The court said that the question of whether section 27 was self-executing may be of paramount importance when the government "as trustee" seeks to prevent the otherwise legal use of private property.¹⁶³

Unfortunately the court did not mention the possibility that private citizens might seek to enforce section 27 against other private citizens, and the case is not helpful in determining whether the amendment would be self-executing in such circumstances. But Harrel has concluded the "Pennsylvania's environmental rights provisions... grant the rights to the people and

refers to the state as trustee of the environment. Such language does not support individual enforcement of the right; rather, the state is granted standing to bring suit under a public trust theory."¹⁶⁴

In this case the court also showed that in its view the object of section 27 is to achieve a "balancing of environmental and social concerns" which is "realistic". To do this, the court adopted the following three part test to determine whether environmental danger is outweighed by the benefits of development: (1) Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources? (2) Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum? (3) Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived there from that to proceed further would be an abuse of discretion.¹⁶⁵

Two other judgements concluded that *Gettysburg* and *Payne* determined that section 27 is self-executing. In *Commonwealth Department of Environmental Resources v. Commonwealth Public Utilities Commission*,¹⁶⁶ the state DER challenged a decision of the

state Commission allowing the PUC to confiscate some private owners' land said to contain an historic farmhouse and to construct an electric transmission line. The private owners joined in the challenge as intervenors, supporting the DER. The DER and one of the landowners argued that section 27 imposed a constitutional duty on the commission to refuse to approve the confiscation if the transmission line would have any effect on the interests set out in section 27. The court dismissed the argument and the application on the grounds that the PUC had met the balancing test written in *Payne*.

In *Community College of Delaware County v. Fox*,¹⁶⁷ three of the seven Commonwealth County Judges disagreed with the majority view that the amendment was self-executing. Adjoining landowners tried to prevent the Pennsylvania Department of Environmental Resources from issuing a permit to the Central Delaware Authority authorizing construction of sewer extension lines to serve a college campus. The environmental damage involved the crossing of a creek and the location of a sewer near a public water supply, a state park and certain underdeveloped property. The action was dismissed, and the court ruled that the balancing test established in *Payne* had not been met by the landowners.

¹⁶⁰ 11 Pa.Cmwth. 14, 12A 2d 86 (1973).

¹⁶¹ *Ibid* at 94.

¹⁶² *Ibid*.

¹⁶³ *Ibid*.

¹⁶⁴ *Supra* note 138 at 815.

¹⁶⁵ *Supra* note 153.

¹⁶⁶ Pa.Cmwth.335 A, 2d 860.

¹⁶⁷ Pa Cmwth. (1975) 342 A. 2d 468.

One of the most difficult matters of this case involves the issue of standing. On application by the landowner, the Environmental Hearing Board vacated the permit which had been issued by the Department of Environmental Resources and sent the issue back to the Department for further consideration. On appeal to the Commonwealth Court, the state argued that the landowners should not have been heard by the Board because they were not "persons aggrieved" and therefore were not entitled to challenge the permit under the Pennsylvania Administrative Agency law. The Board had rejected this argument on the basis of section 27. Despite this ruling and considerable comment showing that a prime goal of section 27 was to expand the citizen's right to standing,¹⁶⁸ the court did not adopt this reasoning. Instead, it concluded that the landowners were qualified under the existing "person aggrieved" standard because the proposed sewer would cross their property, which was "likely... to be adversely affected by any siltation or pollution which might result."¹⁶⁹ Furthermore, the court went on to state that as far as administrative appeals are concerned, the "person aggrieved" test is the only standard to be ap-

¹⁶⁸ Broughton: "The Proposed Declaration of Environmental Rights, Analysis of H.B. 958" (1970) 40 Pa. B. Ass'n Q. at 427-8.

¹⁶⁹ 342 A. 2d at 475.

plied. By applying this traditional test to determine standing rather than giving effect to section 27, the court doubted the ability of the amendment to expand citizens's rights. This restrictive standing test was later applied when the issue arose concerning whether or not a conservation group had the right to challenge actions by state DEC that would adversely affect two state parks.¹⁷⁰

These cases do not indicate the effectiveness of the right provided in section 27 against the rights of either government or private owners. In most of the cases, members of the public sued the government or one government agency sued another. In none of them did private citizens sue a private owner alone. It remains to be seen, therefore, whether the amendment will permit this or whether any individual right established by the amendment must be enforced by government on behalf of the citizen. Nor was the standing of citizens to oppose government agencies clearly established on the basis of the amendment. Although standing of the plaintiff to challenge a government department was assumed in *Payne*, it was questioned in later cases and was granted only on the basis of the traditional "aggrieved person" test. Therefore whether private citizens would have

¹⁷⁰ *Wester Pennsylvania Conservancy v. Commonwealth Department of Environmental Resources*, 367 A. 2d 1147.

standing to sue either government or other private citizens in an action on the basis of section 27 alone remains in doubt, as does the force of any substantive right. The cases reviewed only establish that government agencies must take into account certain environmental considerations and follow certain procedures before taking action which will damage the environment, and the onus is on those objecting to an activity to prove that its harm will outweigh its benefit.¹⁷¹

To date, where the right granted to the public by section 27 has clashed with government powers and private rights, the latter have prevailed.¹⁷² The courts have treated what initially appears to be a substantive right as only a formal right. The right to a clean environment has been treated as a right to procedures. At best, this right is to be balanced against other stronger rights, and, at worst, it is only a right to ensure that government agencies do not act arbitrarily in making decisions that are harmful to the environment.¹⁷³ As Pearson and Hutton have concluded,

Gettysburg instructs that the Amendment is now in force but can only be successfully invoked with extremely persuasive and credible evidence. *Payne* adds to these burdens the imposition of a standard by which to assess activity in light of the amendment, which standard

¹⁷¹ *Supra* note 20, at 231.

¹⁷² *Ibid* at 232.

¹⁷³ *Ibid*.

unfortunately tips the balance against the enumerated value... The cases are crucial since they supply the thrust and direction for future interpretation. Should those future interpretations reflect the course roughly cut to date, we can be resigned to the fact section 27 standing alone will not shift the "balance of power" in the land use decisional process so that environmental values are routinely protected. In the absence of assertive legislative implementation of the public trust powers, the proliferation of development and the insensitivity of zoning policy will most likely roll on unmonitored.¹⁷⁴

IX. ATTEMPTS TO ESTABLISH ENVIRONMENTAL RIGHTS IN CANADA

There is no single jurisdiction in Canada that has enacted an operative provision similar to Article I, section 27 of the Pennsylvania Constitution which purports to establish a right to environmental quality enforceable by individual members of the public.¹⁷⁵ But the concept has gained recognition from the opposition parties of the provinces of Alberta and Ontario and has been incorporated in the environmental legislation of Quebec.¹⁷⁶ In 1978, Robert Clark, Leader of the Opposition in the Alberta Legislative Assembly, introduced a private member's Bill entitled "The Envi-

¹⁷⁴ Pearson and Hutton, "Land Use in Pennsylvania (1976), 14 *Duquesne L. Review*, 180, at 192.

¹⁷⁵ *Supra* note 20, at 206.

¹⁷⁶ *Ibid*.

ronmental Bill of Rights".¹⁷⁷ The preamble to this Bill states in part:

Whereas it is recognized in Alberta as a fundamental principle and a matter of public policy that the residents of the province have the right to enjoy a clean environment, the loss or impairment of which is a loss or impairment of an interest that should have legal recognition; and whereas it is fitting that this principle be affirmed by the legislature of Alberta an enactment whereby those rights may be established and means for their protection be given to all persons. . .

The preamble, however, does not provide for any rights in addition to its substantive provision and it is only a statement of purpose and an aid to interpretation of the other provisions of the Act. Nevertheless, the Bill contains substantive provisions including a grant of standing to commence civil actions to protect the environment against pollution, provisions dealing with the burden of proof in civil actions, and a right to certain government information, but does not grant a right to environmental quality.

In November 1979, Stuart Smith, Leader of Ontario's official opposition introduced to the Ontario Legislature a private member's Bill. The Bill, entitled "The Ontario Environmental Rights Act, 1979,"¹⁷⁸ stated in section 2 that:

¹⁷⁷ The Environmental Bill of Rights, Bill 22, 1979 (19th Legislature, 1st session).

¹⁷⁸ The Ontario Environmental Rights Act, 1979, Bill 185, 1979 (31st. Legislature, 3rd session).

- (1) The people of Ontario have a right to clean air, pure water and the preservation of the natural, scenic, historic and aesthetic value of the environment.
- (2) Ontario's public lands waters and natural resources are the common property of all the people, including generations yet to come, and, as trustee of those lands, waters and resources, the government of Ontario shall conserve and maintain them for the benefit of present and future generations.
- (3) It is hereby declared that it is in the public interest to provide every person with an adequate remedy to protect and conserve the environment and the public trust therein from contamination and degradation.

Neither of these bills was ever enacted. They were blocked by the government of the day. Mr. Clark's bill was not debated. Dr. Smith's bill was debated for one afternoon but it was eventually defeated under a rule permitting any twenty members of the legislature to vote down a private member's bill.¹⁷⁹ In 1980 the Ontario New Democratic Party also had an opportunity to introduce a bill entitled "The Environmental Magna Carta Act".¹⁸⁰ The bill contained a preamble recognizing a right to clean air, pure water and healthy environment, and included a section proclaiming that every person in Ontario has a right to the protection of his environment. Unfortunately it was not debated before the legislative ses-

¹⁷⁹ *Supra* note 20, at 207.

¹⁸⁰ The Environmental Magna Carta Act, 1980, Bill (31 st Legislature, 4th session).

sion ended in June 1980.¹⁸¹

Amendments to Quebec's Environmental Quality Act¹⁸² adopted by the provincial National Assembly in 1978 also made reference to environmental rights. The amendments provide that:

Every person has a right to a healthy environment and to its protection, and to the protection of the living species inhabiting it, to the extent provided for by this act and the regulation, orders, approvals and authorizations issued under any section of this act.

To pursue social justice and economic opportunity for all Canadians through the equitable sharing of the benefits and burden of living in the vast land that is their common inheritance, through the commitment of all Canadians to the balanced development of the land of their common inheritance and to the preservation of its richness and beauty in trust for themselves and generations to come, and through their commitment to overcome unacceptable disparities among Canadians in every region including disparities in the basic services available to them.¹⁸³

In its brief, CELA recommended the modification of this aim to read:

through the commitment of all Canadians to the balanced use of the land of their common inheritance and to the preservation of its richness, beauty and environmental quality in trust for themselves and generations to come, through their commitment to overcome unaccep-

¹⁸¹ *Supra* note 20 at 206.

¹⁸² An Act to Amend the Environmental Quality Act, Bill 69, 1978 (31st legislature, 3rd session).

¹⁸³ Line 13-27 Of s. 4 of the Charter (s.4, Bill C-60).

table disparities among Canadians in every region including disparities in the basic public services available to them and their commitment to environmental protection and sound environmental planning.¹⁸⁹

CELA also recommended modifying section 96 which dealt directly with regional disparities. CELA wanted to introduce an additional section.¹⁹⁰ which would have established a general government policy of protecting environmental quality and in particular would have required environmental impact assessment, the prohibition of pollution-havens resulting from disparity of provincial environmental legislation and the introduction of effective public participation. The aim of CELA's proposed amendments was clearly to establish a substantive constitutional right to a clean environment. The constitution of any state reflects its fundamental values, priorities and commitments and it is suggested here that the constitution:

Should not ignore the environment of Canada and the health of Canadians in its preoccupation with one issue: the political threat of separation of Quebec.¹⁹¹

These recommendations were not adopted by the committee,¹⁹² but recently other voices have been raised in favour of adding the preserva-

¹⁸⁹ *Supra* note 186.

¹⁹⁰ The proposed s. 96 A in the brief.

¹⁹¹ CELA's brief at 8.

¹⁹² *Supra* note 20 at 207.

tion of natural resources and the maintenance of ecological stability to the constitutional reform agenda.¹⁹³

Although Bill C-60 was never enacted, it is significant and unfortunate that the committee totally ignored CELA's representation. However, this fact does go some way to explain the absence of renewed efforts to entrench environmental rights in the Canadian Constitution when the Charter was drafted. It might be argued that perhaps some more positive efforts by environmental groups might have been expected in 1981, given the successful intervention of women's groups and supporters of native rights which resulted in the addition of section 35 (native rights clause) and section 28 (sexual equality clause) to the constitution.¹⁹⁴ However, this is to argue with hindsight and also to presuppose a public concern with environmental issues comparable to the issues of sexual equality and native rights.¹⁹⁵

The problem environmentalists have is determining whether public awareness and demand is a prerequisite to establishing a constitutional environmental right or whether it is legitimate to aspire to such a right in order to promote pu-

blic awareness and establish an environmental ethic. It is suggested that the latter course is preferable. If the public were to be asked whether they supported the ideas of conservation, environmental protection and controlled resource management, undoubtedly the vast majority would readily give then assent. What is needed is a conduit through which to channel these latent aspirations into active public participation and involvement in environmental issues.¹⁹⁶

The problem is not so much one of lack of support as a failure to be mobilized. A constitutional right to a reasonably clean environment would be a particularly appropriate vehicle because environmental degradation is a matter of immediate concern directly affecting every Canadian, irrespective of wealth, religion, race or politics.¹⁹⁷ However, it is clear that, for the time being at least, constitutional amendment is an unlikely mechanism by which to achieve recognition of such a right.¹⁹⁸

X. ENVIRONMENTAL RIGHTS IN INDONESIA

In Indonesia, environmental rights have both a constitutional and a statutory basis. The Constitution of 1945 sets forth a policy sta-

tement relating to the status and the use of resources which read: "Land and water" and the resources contained therein are controlled by the state and utilized for the maximum welfare of the people".¹⁹⁹ The words "land and water" were later expanded by Agrarian Act No 5 of 1960 to include air.²⁰⁰ Under the Act the state's right to control authorizes it " (a) to regulate the allocation, use, provision, and sustenance of the resource; and (b) to determine and regulate legal relations between persons and legal actions pertaining to the resources".²⁰¹ The provisions of these laws, with a few changes, was later incorporated into article 10 of the Environmental Management Act (EMA), which provides that:

- (1) Natural resources are controlled by the state and utilized for the maximum welfare of the people.
- (2) The utilization of man-made resources which affect the livelihood of the general public shall be regulated by the state for the maximum welfare of the people.
- (3) The right to control and regulate by the state, as stated in paragraph (1) and paragraph (2) of this Article, authorizes the state:
 - (a) to regulate the allocation, development, use, reuse, recycling, provision, management and supervision of resources as stated in paragraph (1) and (2) of this article.

- (b) to regulate legal actions and legal relations between persons and other legal subjects pertaining to the resource as stated in paragraph (1) and (2) of this article,
- (c) to regulate environmental taxes and retribution.

- (4) Further provision pertaining to paragraph (3) of this article shall be established by legislation.²⁰²

Although these provisions are worded in general language, they may create a cause of action for those interested in protecting the public use of certain resources. They may give standing to members of the public, without any pecuniary or property interest, to challenge a government use of government owned property in a manner contrary to the public interest. They may be useful as a remedy for citizens to challenge government decisions regarding the use of public resources, and may be useful in cases where the government must take action against a private citizen, but they clearly do not support actions by private citizens against other private citizens. Members of the public who have no property interest are not entitled to take legal actions against private citizens or private entities that have discharged or emitted contaminants into land, water or air. Therefore it is considered necessary to provide these individuals with rights to a good and healthy environment.

A right to a good and healthy environment is stipulated in para-

¹⁹³ Mains, "Some Environmental Aspects of a Canadian Constitution (1980), 9 alternative, 12, at 14.

¹⁹⁴ *Ibid.*

¹⁹⁵ *Supra* note 115, at 403.

¹⁹⁶ *Ibid.*

¹⁹⁷ *Ibid.*

¹⁹⁸ *Ibid.*

¹⁹⁹ The Constitutions 1945, article 33 (3).

²⁰⁰ The Agrarian Act No. 5 of 1960, article 1 (2).

²⁰¹ *Ibid* article 2 (a)(b)(c).

²⁰² EMA 1982, article 10 (1)(2)(3).

graph (1) of article 5 of EMA 1982, which reads: "Every person has the right to a good and healthy environment". The right is related to the duty of every person as provided in paragraph (2) of the same article, which states: "Every person has the duty to maintain the environment and to prevent and abate environmental damage and pollution."²⁰³ Hardjasoemantri, one of the authors of the Act, suggests that the right is meant to serve as a "subjective right",²⁰⁴ as indicated by Heinhard Steiger in his article "The Fundamental Right to a Decent Environment".²⁰⁵ Steiger points out that such a right gives standing to each member of the public to bring legal action in order "to have his interest of a decent environment respected".²⁰⁶ From a citizen's point of view the article serves two different functions: "(1) to defend himself against an interference with his environment and (2) to demand the performance of an act in order to preserve, to restore or to improve his environment." These functions have been incorporated in article 20 of EMA 1982, and can be seen in provisions set out. These are included in paragraph one, regarding the right of the victims to be given com-

²⁰³ *Ibid* article 5, (1)(2).

²⁰⁴ Hardjasoemantri, K. *Environmental Legislation in Indonesia* (Yogyakarta: Gadjahmada University Press, 1985) at 9.

²⁰⁵ *Ibid*.

²⁰⁶ *Ibid*.

pensation, in paragraph two, related to procedures for the submission of complaints by victims, and procedures for the investigation by a team of the type, kind, and extent of damage, and procedures for seeking compensation; and in paragraph three, concerning payment to the state of the costs of the restoration of the environment.²⁰⁷

XI. CONCLUSION

The creation of environmental rights basically has two major goals: to free the courts from most of the common law restraints and to enable them to articulate and enforce a public right to environmental quality. In addition, the ultimate aim is to create an environmental right that is not dependent on property or financial interest, but which is equivalent to property rights. The Michigan Environmental Protection Act and Minnesota Environmental Rights Act removed or changed all the common law doctrines that were thought to have hindered the courts, and abolished restrictions on standing. The burden of proof is the only traditional doctrinal problem which still remains, and even this is partly a matter of form rather than substance. Although the plaintiff must establish a *prima facie* case of pollution, impairment or destruction, he need not establish that the defendant's conduct is unreasonable because that issue is implied under

²⁰⁷ *Ibid*.

the affirmative defence, on which the defendant has the burden of proof. To this extent the acts effectively apply strict liability and shifts the burden of proof to the defendant.

The steps taken by Michigan and Minnesota should be taken into accounts by legislators in Indonesia in drafting regulation to impliment environmental rights. Principles of strict liability and the shifting of the burden of proof could probably be included in the further regulation. But one thing that has to be realized is that the doctrine of strict liability actually has limited value to those

who seek environmental protection, since relief in strict liability is on one to one basis, is usually limited to monetary damage and involves the difficult problem of proving causation. The problems of proving causation and securing total relief are specially troublesome when there are multiple causes of a single harm. This situation is created by the fact that many forms of injury have causes other than pollution, and it is often difficult or impossible to establish which among possible causes is responsible for the illness in a given individual.